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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/728,787

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Ho-Kyoon Chung

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10/19/2006

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EXAMINER

ARANCIBIA, MAUREEN GRAMAGLIA

ART UNIT

PAPER NUMBER

1763

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,787

Applicant(s)

CHUNG ET AL

Examiner

Maureen G. Arancibia

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8,11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 2, 4-6, 8, 11, and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,391,137 to Matsushima in view of U.S. Patent 6,908,638 to Ueda et al.**

Matsushima teaches a prior art method of manufacturing a thin flat panel display (Figure 12), comprising: preparing an etchable upper substrate 2 and an etchable lower substrate 1; forming image display devices (Column 1, Lines 45-49) on an inner surface of the lower substrate, and isolating them within device divisions 6; combining the upper and lower substrates, such that the image display devices are each completely surrounded by an inner sealant 3 (made continuous by filling injection hole 3a; Column 1, Lines 50-54 and 64-67; Figure 12); etching the outer surfaces of the upper and lower substrates (Column 2, Lines 15-20); and cutting the combined upper and lower substrates into individual image display units (Column 3, Lines 1-5). Each of the image display devices are completely surrounded by an inner sealant 3, and all of the image display devices and the inner sealants are surrounded by an outer sealant 4. (Figure 12; Column 1, Lines 54-56)

Matsushima does not expressly teach that the combining in the prior art method *further* comprises completely covering each lateral side of the combined upper and lower substrates with an unetchable protection film.

However, Matsushima teaches another method, wherein each lateral side of combined upper and lower substrates 100, 101 is completely covered with an unetchable protection film 203. (Column 8, Lines 45-50; Figures 3 and 4)

It would have been obvious to one of ordinary skill in the art to modify the prior art method taught by Matsushima to additionally completely cover each lateral side of the combined upper and lower substrates with an unetchable protection film. The motivation for doing so, as taught by Matsushima (Column 8, Lines 38-42), would have been to prevent the etchant from entering the gap between the upper and lower substrates during etching.

Matsushima does not expressly teach that each image display device is an organic EL display device.

Ueda et al. teaches that display devices can be organic EL display devices, formed by coating an organic luminescing layer 3. (Column 1, Lines 15-26; Column 2, Lines 10-15; Column 6, Lines 5-6)

It would have been obvious to one of ordinary skill in the art to modify the method taught by Matsushima to have the individual display devices be organic EL display devices. The motivation for making such a modification, as taught by Ueda et al. (Column 18, Lines 27-37), would have been to employ display devices with a long service life. More broadly, it would have been obvious to substitute organic EL display

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devices for the LCD devices taught by Matsushima, since both are art-recognized equivalent means *of generating an electronic display*.

In regards to Claims 2 and 6, Matsushima teaches that the upper and lower substrates 1, 2, are formed of glass. (Column 1, Line 45)

In regards to Claims 4 and 8, Matsushima does not expressly disclose that the prior art method can be used to etch the substrates to each have a thickness of at most 0.5 mm.

However, Matsushima teaches another method in which each of the upper and lower substrates 100, 101, is etched to each have a thickness of about 0.3 to 0.7 mm. (Column 9, Lines 1-3)

It would have been obvious to one of ordinary skill in the art to modify the prior art method disclosed by Matsushima to etch the substrates 1, 2, to each have a thickness of at most 0.5 mm. The motivation for doing so, as taught by Matsushima (Column 1, Lines 23), would have been to make a lightweight display device.

Response to Arguments

3. Applicant's arguments filed 3 August 2006 have been fully considered but, to the extent to which they still apply, they are not persuasive.

Specifically, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the claimed organic EL device "inherently includes more components than [the] two electrodes and a light-emitting layer" that are taught by Ueda et al.) are not recited in the rejected claim(s). Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner notes that it has also been held that during patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). The examiner maintains that the organic EL "element" taught by Ueda et al. meets the broadly recited limitation of a "device," since it actively performs the desired function of producing luminescence. (Ueda et al., Column 18, Lines 34-37)

Conclusion

4. Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maureen G. Arancibia whose telephone number is (571) 272-1219. The examiner can normally be reached on core hours of 10-5, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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